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qualified as Small Entity.  
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insufficient it's charge  
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BE IT KNOWN that We, **Eli ZHADANOV** and Sam

**ZHADANOV**, have invented certain new and useful improvements in

**A MULTI-PURPOSE KITCHEN PULL-OUT FAUCET**

of which the following is a complete specification:

BACKGROUND OF THE INVENTION

The present invention relates to kitchen pull-out faucets.

Kitchen pull-out faucets are known and widely used for washing objects which can be reached by a faucet when it is pulled out of its enclosure. A known kitchen pull-out faucet includes a faucet head which is mounted on a handle, so that a person who uses a kitchen pull-out faucet can hold the handle and direct a flow of water through the faucet head onto corresponding objects. When it is necessary in addition to provide corresponding scrubbing actions to be applied to an object, additional scrubbing elements are used separately, such as sponges, brushes, etc. This definitely creates inconvenience since a person must hold the kitchen pull-out faucet in one hand and hold the additional scrubbing element in the other hand. It is believed it is advisable to provide a kitchen pull-out faucet which eliminates the above mentioned disadvantages of the prior art.

### SUMMARY OF THE INVENTION

Accordingly, it is an object of the present invention to provide a kitchen pull-out faucet which is a further improvement of the existing kitchen pull-out faucets.

In keeping with these objects and with others which will become apparent hereinafter, one feature of the present resides, briefly stated, in a kitchen pull-out faucet which has a handle connectable with a source of water; a head attached to said handle and formed so that water can pass through said head onto an object when the person holds said handle, and an additional scrubbing element which is operative for applying to an object a scrubbing action which is different from a washing action of water, said additional scrubbing element being attached to said head and formed so that when a person holds said handle in one hand, simultaneously said faucet head is held and said additional scrubbing element is held in one hand, and a person can therefore provide a flow of water from said faucet head onto an object body and also an additional action by said additional scrubbing element to said object.

When the kitchen pull-out faucet is designed in accordance with the present invention, a user by holding the handle of the kitchen pull-out faucet in one hand can direct a flow of water through the faucet head onto the object, and at the same time, when needed, the user attaches the additional scrubbing element to the head and can provide an additional scrubbing action to the object, while the water issued from the faucet head can flow through the additional scrubbing element, providing a rinsing action, or can flow directly onto the object. Thus, the faucet of the invention becomes a multi-purpose faucet, in which only the faucet head can be used, or the additional scrubbing element can be used, or both.

The novel features which are considered as characteristic for the present invention are set forth in particular in the appended claims. The invention itself, however, both as to its construction and its method of operation, together with additional objects and advantages thereof, will be best understood from the following description of specific embodiments when read in connection with the accompanying drawings.

### BRIEF DESCRIPTION OF THE DRAWINGS

Figure 1 is a perspective view of a known kitchen pull-out faucet;

Figure 2 is a view showing an additional scrubbing element attachable to the faucet head of the multi-purpose kitchen pull-out faucet;

Figure 3 is a view showing a connecting element for connecting the additional scrubbing element to the faucet head of the multi-purpose kitchen pull-out faucet;

Figure 4 is a view showing the connecting element in accordance with another embodiment;

Figure 5 is a view showing the assembled multi-purpose kitchen pull-out faucet in accordance with the present invention, including the handle, the faucet head and the additional scrubbing element connected by the connecting element to the faucet head;

Figure 6 is an end view of the additional scrubbing element shown in Figure 3;

Figure 7a-7d are views showing the additional scrubbing element formed as a brush element;

Figures 8a-8d are views showing of an additional scrubbing element formed as a ring-shaped element with spikes; and

Figure 9 is a view showing an additional scrubbing element formed as a pumice or a grinding stone.

### DESCRIPTION OF THE PREFERRED EMBODIMENTS

A multi-purpose kitchen pull-out faucet in accordance with the present invention has a handle which is identified with reference numeral 1, and a faucet head which is attached to the handle 1 and provided with a plurality of opening 3 as shown in Figure 1. The constructions of the handle 1 and the faucet head 2 can be different and they are not germane for the present invention. The handle 1 is hollow and connectable to a source of water.

In accordance with the present invention, the kitchen pull-out faucet is provided with an additional scrubbing element which is identified with reference numeral 4 in Figure 2. In the embodiment shown in Figure 2 the additional scrubbing element is formed for example as a porous element, such as a porous sponge, a fiber pad and the like. The additional scrubbing element 4 is removably attachable to the faucet head 2 of the kitchen pull-out faucet. In particular, one of the possible ways to attach the additional scrubbing element 4 to the faucet head is to provide a connecting element 5 shown in Figure 3.

The connecting element 5 is ring-shaped. It can be attached to the faucet head 2 by simply snapping on a circular peripheral surface of the faucet head 2. In addition, the connecting element 5 is provided with bent projections 6. On the other hand, the additional scrubbing element 4 has a holding member 7 which is attached to its side surface by glueing or welding and has a plurality of undercut slots 8 as shown in Figure 6. The additional scrubbing element 4 can be attached to the connecting element 5 by introducing the projections 6 into the slots 8 of the holding member and turning the additional scrubbing element 4 and the connecting element 5 relative to one another around the axis, so as to provide a bayonet connection. Then, the connecting element 5 together with the additional scrubbing element 4 can be snapped onto the faucet head 2.

In operation the user holds the handle 1 of the kitchen pull-out faucet in one hand, and water flows through the faucet head 2 onto an object. Simultaneously, the user can provide an additional action on the object by the additional scrubbing element 4 which is attached to the faucet head 2. The water which issues from the faucet head 2 passes through the pores of the porous additional scrubbing element 4 and onto the object without splashing while the material of the additional scrubbing element 4 provides a corresponding rubbing, scratching and other scrubbing action to



the object. Therefore, it is not necessary to have two separate devices, namely a kitchen pull-out faucet with the handle and the faucet head on one hand and an additional rubbing, scratching or scrubbing element on the other hand, and to manipulate them with two user's hands to operate them separately.

Figure 4 shows a connecting element 5' which is substantially similar to the connecting element 5 of Figure 3, but has throughgoing openings 5" on its portion. As a result, water flowing through the faucet head 2 can flow out through the openings 5" onto the object. In this case, the additional scrubbing element can be formed not permeable for water, so that water does not flow through it.

In another embodiment the connecting element 5' is provided with the openings 5", and the additional scrubbing element is nevertheless water permeable. In this case one part of water flows through the openings 5" directly onto the user's body, while another part of water flows through the additional scrubbing element to provide a desired distribution of water for washing action and for scrubbing action.

Figures 7a-7d show an additional scrubbing element which is identified as a whole with reference numeral 9 and is formed as a brush. It has a body 10 and a plurality of bristles 11 extending from the body 10. The body 10 can be provided with side openings 5" (Figures 7a, 7b), with a plurality of throughgoing axes-parallel openings (Figure 7c), or with a central opening 12 (Figure 7d). When the additional scrubbing element 9 is attached to the faucet head 2, for example by snap-on, and water issues from the faucet head 2, it passes through the openings 5", 5"" or 12 of the additional scrubbing element 9, and at the same time the user can use the additional scrubbing element 9, in particular its bristles 11 for applying a corresponding action to the object.

Another additional scrubbing element 13 is shown in Figures 8a-8d. It has a body 14 which is formed for example as a plastic ring and provided with a plurality of spikes 15. The body 14 can be provided with side openings 5" (Figures 8a, 8b), with throughgoing axes-parallel openings (Figure 8c), or with a central opening 16 (Figure 8d). When the additional scrubbing element 13 is attached to the faucet head 2, for example by snap-on, and a user holds the handle, water flows through the faucet head 2 and through the openings 5", 5"", or 16 of the additional scrubbing element 13

onto an object, at the same time the user can apply an additional action to an object by the spikes 15.

Figure 9 shows an additional scrubbing element 17 formed as pumice or a grinding stone. It has a body 18 composed of a corresponding material and provided with a central throughgoing opening 19. The operation is substantially the same. In particular when the additional scrubbing element 17 is attached to the faucet head 2, for example by snap-on, and the user holds the handle 1, water issues from the faucet head 2 and passes through the central opening 19 of the additional scrubbing element 17 to flow onto the object and at the same time the body 18 of the additional scrubbing element 17 can be used for corresponding cleaning, scrubbing and other actions of the object.

It is believed to be clear that in accordance with the present invention, in an advantageous and unobvious manner it is possible, by holding the handle of the kitchen pull-out faucet in one hand to apply a washing action of water flowing from the faucet head and also to apply an additional scrubbing action by the additional scrubbing element which is attached to the faucet head.

It will be understood that each of the elements described above, or two or more together, may also find a useful application in other types of constructions differing from the types described above.

While the invention has been illustrated and described as embodied in a kitchen pull-out faucet, it is not intended to be limited to the details shown, since various modifications and structural changes may be made without departing in any way from the spirit of the present invention.

Without further analysis, the foregoing will so fully reveal the gist of the present invention that others can, by applying current knowledge, readily adapt it for various applications without omitting features that, from the standpoint of prior art, fairly constitute essential characteristics of the generic or specific aspects of this invention.

What is claimed as new and desired to be protected by Letters Patent is set forth in the appended claims.